C. Specification

Please amend the paragraphs at page 12, lines 15-32, in the substitute specification as follows:

~~--FIG. 7 illustrates schematically arrangements of respective probes in the detection substrate with 64 DNA probes bound to sections arranged in the form of a 8 x 8 matrix, respectively;~~

FIG. [[8]] 7 shows schematically a pattern of a spot 64 x 64 array in which 64 test samples are spotted in the form of a two-dimensional 8 x 8 array on each section, for the detection substrate on which sections with probes fixed therein are arranged in the form of the 8 x 8 matrix;

FIG. [[9]] 8 shows schematically a result of spotting 64 test samples in the form of the two-dimensional 8 x 8 array on each section for 64 probes fixed in sections arranged in the form of the 8 x 8 matrix to carry out the hybridization reaction; and

FIG. [[10]] 9 shows an example of the structure of sections delimited by hydrophobic frame-structured walls provided on the detection substrate of the present invention, and arranged in the form of the 8 x 8 matrix.--

Please amend the paragraph at page 42, lines 10-26, in the substitute specification as follows:

--An example of sections arranged in a matrix form that is provided on the detection substrate of the present invention is shown in FIG. [[10]] 9. The sections in a square matrix form have a structure in which heights (walls) having frame structures are provided on the surface of the solid substrate, and arranged rectangular recesses (wells) are

separated. Specifically, the recesses (wells) separated from one another by the heights (walls) having frame structures are formed by coating the entire surface of the solid substrate with a material forming heights (walls), and thereafter providing rectangular through-holes (cut-off portions) to open recesses (wells). Thus, the bottom of the recess (well) has an exposed surface of the solid substrate. The exposed portion of the surface of the solid substrate is subjected to processing for providing a surface to which the oligonucleotide can be bound. As a result, the oligonucleotide is fixed only in the bottom of this recess (well).--

Please amend the paragraphs at page 66, after Table 2, to page 67, line 33, in the substitute specification as follows:

--Then, for each of the 64 types of labeled prove DNAs, an 8 μM solution containing glycerin, urea and thiodiglycol at the final concentration of 7.5%, respectively, and acetylenol EH at the final concentration of 1% was prepared. As in Example 4, using BJ Printer Head BC 62 (manufactured by Canon Inc), a different DNA probe solution was charged by 100 ml in each of the six nozzles of the printer head. Using a plurality of such printer heads, a detection substrate with total 64 DNA probes applied to and fixed in each section of 2 mm square in the form of a "solid print" and arranged in a matrix form (8 x 8) was prepared. ~~A schematic layout of the 64 DNA probes arranged in a matrix form (8 x 8) on the detection substrate is shown in FIG. 7.~~

2. Preparation of array spots of test samples.

As in the case of Example 4, 64 types of labeled cDNAs were spotted in the form of the two-dimensional 8 x 8 array on each region of 2 mm square for fixing probes. Specifically, as schematically shown in FIG. [[8]] 7, a pin system array preparing apparatus was used to form spots in the form of the two-dimensional 8 x 8 array on the sections arranged in a matrix form (8 x 8) in which each DNA probe was fixed.

3. Hybridization reaction

A hybridization reaction was carried out using conditions and procedures similar to those in Example 4. The result thereof is shown in FIG. [[9]] 8. In the arrangement ~~shown in FIG. 7~~, with respect to spots on probes corresponding to the base sequence of the 42nd normal gene, fluorescence intensity was weak for six spots as in Example 4. Also, no fluorescence was observed for one spot. In addition thereto, it was observed that fluorescence was emitted from the spot at three points in the tenth probe region, at two points in the 41st probe region, and at one point in the 46th probe region, respectively.--

Please amend the paragraph at page 70, line 34, to page 71, line 6, in the substitute specification as follows:

--As in the case of Example 4, 64 types of labeled cDNAs were spotted in each probe region of 2 mm square as an arrangement of 8 x 8 spots, as shown in FIG. [[8]] 7, using a pin system array preparing apparatus.--